

CLAIMS

1) Mixing and extrusion machine for rubber-based and silicone-based plastic materials of the type comprising a dump extruder equipped with conical converging twin screws located in a batching chamber, characterised in that the outlet of said batching chamber is temporarily sealed by a removable blind flange, said batching chamber also acting as compounding chamber.

2) Machine as claimed in claim 1) characterised in that the front end of said conical screws (10) grazes said sealing blind flange (11).

3) Machine as claimed in claim 1) or claim 2), in which said batching chamber is sealable in an airtight manner to carry out the compounding process under vacuum.

4) Machine as claimed in claim 1), 2) or 3), in which said conical screws are counterrotating.

5) Compounding and extrusion method of a semifinished rubber-based or silicone-based plastic product, of the type comprising the step of extruding said semifinished product from a dump extruder equipped with two conical converging twin screws, characterised in that it further comprises the following prior steps:

- applying onto the outlet of the dump extruder a blind flange that closes the outlet,
- feeding the raw material to be compounded into the batching chamber of said conical screws,
- starting the dump extruder for the time necessary to obtain a compounding of the raw material in said chamber,
- removing said blind flange and continuing the operation of the dump extruder up to the extrusion of the compound.

6) Method as claimed in claim 5), characterised in that - after the step of introducing the raw material - the following further steps are carried out:

- supplying a sealing cover over the opening where the raw material is introduced,
- placing said batching chamber under vacuum for the whole mixing time.

7) Method as claimed in claim 5) or 6), in which - after removing said blind flange - a flange with an open drawing plate

of the desired shape is mounted.